

FILES

File 16:Gale Group PROMT(R) 1990-2003/Aug 08
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File 47:Gale Group Magazine DB(TM) 1959-2003/Jul 31
(c) 2003 The Gale group
File 148:Gale Group Trade & Industry DB 1976-2003/Aug 08
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Set	Items	Description
S1	4671	(WIRELESS (5N) PDA)
S2	48	S1 AND (DOWNLOAD? (6N) MUSIC)
S3	17	S2 NOT PY>2000
S4	9	RD (unique items)
S5	95	S1 AND (DOWNLOAD? (6N) PDA)
S6	4	S5 NOT PY>1999
S7	3	RD (unique items)
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TS9/9/1

9/9/1 (Item 1 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

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06869380 Supplier Number: 58237504 (THIS IS THE FULLTEXT)

DSPs: digital music's virtuoso performer. (DSP Experts) (Technology Information)

Delagi, Greg

Electronic Buyers' News, p30

Dec 13, 1999

ISSN: 0164-6362

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 663

TEXT:

Shoppers visiting electronics stores recently couldn't miss the assortment of devices capable of downloading music from the Internet and capturing it for playback elsewhere. With the security offered by some of the newer players comes the expectation that more musicians will choose to distribute their music via the Internet, giving the consumer greater selection.

In fact, forecasters predict that music soon will be an "experience" that can be purchased with little hardware and packaging, as the new portable digital music players are projected to reach 18 million households by 2003.

The technology that will enable such a music-industry transformation is the digital signal processor and its software-the same technology that powers digital cell phones, digital still cameras, medical imaging equipment, automobile antilock brakes, high-speed color printers, and hard-disk drives. In the case of Internet audio players, the DSP and software allow encryption and decoding, providing the security that artists demand before placing their music on the Internet. The finest DSPs provide improved sound quality and longer battery life, allowing for 10 to 12 hours of clear digital music.

How did such a large number of portable digital-music-player manufacturers emerge in such a short time? The manufacturers were able to tap the products of third-party software writers that had already written the algorithms for DSPs to make Internet audio music secure. Access to such a network allows for quick development, since manufacturers can focus on differentiating the features their players offer rather than on the product's operation.

Manufacturers of portable digital music players want programmable DSPs that are capable of playing more than one downloadable audio format. Selecting a silicon supplier with multiple audio formats enables manufacturers to offer their consumers a seamless listening experience and access to the broadest range of digital music and audio content available, which, after all, is what consumers want.

Programmability in the DSP allows new compression formats to be uploaded from the Internet as they become available. If a common protocol were to develop, these manufacturers' products would not become obsolete with each new generation. That way, the consumer's investment in the portable digital music player is protected. The upgrade to new or alternate compression software would be virtually seamless because the software is downloaded with the music.

These manufacturers of portable digital music players were able to use a complete chipset solution with appropriate audio amplifiers, power-supply solutions, digital-to-analog converters, analog-to-digital converters, and other analog components, as well as a large suite of licensable audio software for product designs. Having good tools for

development shortened the time the products spent in development.

In addition to programmability, manufacturers of portable digital music players also wanted high-performance DSPs with mips to spare for new software and tiny appetites for power. The greater integration of memory and peripherals on the chip was also a consideration for manufacturers because players may be created in smaller sizes.

Makers of portable digital music players sought a silicon supplier capable of quickly ramping to volume production to capture the market window for introducing new, multiple audio products in time for the holidays. With volume production, manufacturers were able to offer products to the consumer market at affordable prices.

Now that at least 19 manufacturers have designed in DSPs that enable the units to play multiple compression formats, where do they go from here? The next challenge will be adding the portable-digital-music capability to a number of new products. Soon, a consumer will be able to purchase a digital still camera, a cell phone, or a PDA with downloadable music capability. He or she might find a PDA that plays music, or be able to listen to music while reading an electronic book or using a cell phone. Clearly, the DSP is enhancing the creativity of the brightest of engineers. As consumers, we all will benefit from these revolutionary new products.

Greg Delagi is vice president of Catalog DSP in the Semiconductor Division at Texas Instruments Inc., Stafford, Texas.

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PUBLISHER NAME: CMP Media, Inc.

EVENT NAMES: *600 (Market information - general); 010 (Forecasts, trends, outlooks)

GEOGRAPHIC NAMES: *1USA (United States)

PRODUCT NAMES: *3573290 (Computer Peripherals NEC); 3573293 (Computer Graphics, Sound and Video Processors); 3662601 (Digital Signal Processing Equip)

INDUSTRY NAMES: BUSN (Any type of business); CMPT (Computers and Office Automation); ELEC (Electronics)

NAICS CODES: 334119 (Other Computer Peripheral Equipment Manufacturing); 33429 (Other Communications Equipment Manufacturing)

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TS7/9/2

7/9/2 (Item 2 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

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06689977 Supplier Number: 55978991 (THIS IS THE FULLTEXT)

Getting down to specifics. (Technology Information) (Brief Article)

Smith, Richard

Telephony, pNA

Sept 27, 1999

ISSN: 0040-2656

Language: English Record Type: Fulltext

Article Type: Brief Article

Document Type: Magazine/Journal; Trade

Word Count: 204

TEXT:

Next gen network technology gives service providers the opportunity to build on their strengths by offering high value-added services over their core plant vs. playing catch-up through a series of ad hoc networks. Such offerings can include:

- Personal mobility services: Stuck in the airport with a delayed flight? Turn on your wireless personal digital assistant (PDA) and click "download voice and e-mail." The PDA identifies itself to the LAN in the airport and establishes a secure tunnel to the end user's mail service provider, downloading both voice and e-mail messages. After boarding the plane, the end user can plug the PDA into the airline seat's PC, respond to the messages and save those responses on the PDA.

- Service portability: Imagine being able to work anywhere as though you were in the office. The next gen network can store a large amount of information about the end user. Call agent software, in conjunction with an intelligent device, can allow end users to save and forward the user's profile and features from a phone or PC in the office to a remote location. With this type of open network environment, mobile workers would be able to transport all the features they have at home or office.

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PUBLISHER NAME: Intertec Publishing Corporation, A PRIMEDIA Co.

EVENT NAMES: *360 (Services information)

GEOGRAPHIC NAMES: *1USA (United States)

PRODUCT NAMES: *4811500 (Specialized Telecommunication Services)

INDUSTRY NAMES: ADV (Advertising, Marketing and Public Relations); BUSN (Any type of business); TELC (Telecommunications)

NAICS CODES: 51331 (Wired Telecommunications Carriers)

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TS13/9/4

13/9/4 (Item 4 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)

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06605134 Supplier Number: 55629869 (THIS IS THE FULLTEXT)

Sanyo Develops Cell Phone with Music Download and Playback Function.

Comline Telecommunications, p990825100010

August 25, 1999

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 115

TEXT:

Sanyo Electric has developed a cell phone capable of downloading music from the Internet and playing it back. The phone will not come out commercially until copyright protection issues are settled, but Sanyo confidently predicts the music downloading and playback function will become prominent elements of cell phones of the future. The item uses audio compression for quicker downloads and records the content of a small memory card and an internal semiconductor. Sanyo promises that users will be able to enjoy high-quality sound over headphones. It also says that in the future a single cell phone will provide users with not only music but visual content as well.

Ref: COMLINE Business News, 08/25/99

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PUBLISHER NAME: ODS Corporation

COMPANY NAMES: *Sanyo Electric Company Ltd.

EVENT NAMES: *336 (Product introduction)

GEOGRAPHIC NAMES: *9JAPA (Japan)

PRODUCT NAMES: *3660000 (Communications Equipment (General)); 3662166
(Cellular Telephones)

INDUSTRY NAMES: INTL (Business, International)

NAICS CODES: 3342 (Communications Equipment Manufacturing); 33422 (Radio
and Television Broadcasting and Wireless Communications Equipment
Manufacturing)

SPECIAL FEATURES: INDUSTRY; COMPANY

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